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| (54) Title: PACKAGES WITH PRINTED DESIGNS FOR HYGIENIC PRODUCTS  |   |   |
| (57) Abstract<br><br>Single use hygienic products such as pampers, diapers, sanitary napkins or linings are traditionally wrapped in one or more envelopes. One of the envelopes bears usually some information about the product. It is provided to wrap the product in an envelope bearing images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer. The images may include hygienic advises, recommendations for children education and care, complexes of sport exercises, and also proverbs, sayings, aphorisms, short poems, children's fairy tales, wishes, interesting facts and observations, puzzles, rebuses, chess tasks and etudes, conundrums. The images on envelopes of products incorporated in a block making the minimal commodity unit shall be various but shall be logically interconnected. |   |   |

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## PACKAGES WITH PRINTED DESIGNS FOR HYGIENIC PRODUCTS

This invention relates to the art of sanitation and hygienics and concerns to  
5 individual hygienic single use products such as pampers, diapers, sanitary  
napkins or linings, and similar products.

**Background Art**

Pampers, diapers, sanitary napkins or linings and similar single use  
10 products of hygienic purpose, which are made of various materials and have a  
various design, come to retail trade in blocks of individual products incorporated  
by common packing. Said blocks make minimal commodity unit, while said  
individual products usually are not sold by pieces.

Any hygienic product which is included in the block, may or may not have  
15 an individual envelope.

The common packing of minimal commodity unit bears on its surface  
images including the unified minimally necessary information on the goods: the  
name of the product, some information on its manufacturer, on quantity of the  
products in packing and so on. Sometimes they include some additional  
20 information concerning properties of the goods or a method of its use.

Sometimes the images placed on surfaces of common packing are pictures,  
for example, they may be logos, and also some decorative elements.

An individual envelope of each product (if any) bears on its surface images  
which duplicates completely or partially the images placed on common packing,  
25 but in most cases it bears no images at all.

Sometimes the product itself may serve as the carrier of the additional  
visual useful information about the product and its condition.

It is known, for example, a children's diaper which have a band of water-  
absorbing paper placed between a water-absorbing lining and an external

translucent water-proof cover. The band bears a picture made of a paint which is not dissolved in water. This band becomes transparent being wet, and the picture can be seen. It makes possible to define the degree of water absorption by the intensity of the band coloring. (See USA patent US 4705513, IPC A 61 F 13/16, 5 1987).

A picture may be placed on an external surface of a children's diaper by the thermochrome ink. The picture can serve as the indicator of diaper condition. The color of the picture changes, if the diaper external layer temperature exceeds the certain norm, that indicates the raised diaper humidity. (See USA patent US 10 5389093, IPC A 61 F 13/15, 1995).

An indicator which is made of a water-solved paint may be placed on an external surface of sanitary linings. It is well seen in a dry condition, and it disappears at wetting of the lining. (See USA patent US 4022211, IPC A 61 F 13/16, 1977).

15 Thus, the envelope and/or common packing of the afore mentioned individual hygienic products may serve as carriers of the minimally necessary information about the product. The product itself, including its surface, may sometimes serve as the carrier of the additional information about its condition during the use.

20 The general approach is known to use the goods of daily demand, mainly their packing or elements of packing, as carriers of an information which has been not connected to properties of the goods, preferably of advertising nature.

There was proposed, in particular, to place a picture on foodstuff packing. The picture was an instruction on opening of the packing. (See USA patent US 25 5094863, IPC B 43 M 7/00, 1992).

Advertising texts were placed on a seen surface of an internal wrapper of cigarettes packed into a cardboard pack. (See European patent EP 0646531, IPC B 65 D 85/10, 1997).

It was proposed to place an additional stitch in cardboard cigarette packing. Surface of the stitch bears an advertising information. (See European patent EP 0665174, IPC B 65 D 85/10, 1997).

There is no information known to the applicant about the use of surfaces of packing or elements of packing of single use hygienic products as carriers of any information, exceeding the minimally required one on the products.

The standard method of single use hygienic products packing provides for placing of some number of the individual products in a common packing, which surface bears images containing the minimally necessary information on the products. Each product may be covered with an individual envelope bearing on its surface the same image which is placed on the common packing. Such block of products makes a minimal commodity unit for a retail trade.

#### Brief Description of the Invention

Main aim of the present invention is to increase attractiveness of single use individual hygienic products such as pampers, diapers, sanitary napkins and linings, and similar products, and, accordingly, to improve competitiveness of such products and to increase consumer's demand for them.

Such result is achieved because:

- each proposed product is the product covered with an individual envelope, which surface bears images in the form of texts and/or pictures of educational, entertaining, instructive or other nature attractive to a consumer;
- proposed method of individual hygienic products packing provides that non-identical images shall be placed on surfaces of envelopes covering the individual products, which altogether makes a minimal commodity unit.

At implementation of the invention, each product is placed in an individual envelope which external surface bears images in the form of texts and/or pictures of figures of the attractive to a consumer contents.

Some number of such individual products, each of which is covered with an individual envelope, are incorporated in blocks making minimal commodity units, and placed in common packing which external surface bear the standardized image including minimally necessary information on the products.

5       The individual envelope, which cover the afore mentioned products, may be made of a material on a paper basis, or of polymers.

In the preferred mode of implementation of the invention, the hygienic product shall be covered with the individual envelope from all sides, so that the closed tight (hermetic) space is created inside the envelope.

10       The images which are placed on a surface of the envelope, may be in the form of texts, pictures, or combinations of the texts and pictures, completed on sense and plot, which contents and form should attract attention and interest of a consumer.

Here and below the "text" means an independent image carrying a readable  
15 information and occupying, at least, a part of the envelope surface; and the "picture" means all other independent images occupying, at least, a part of this individual envelope surface, except for textual ones.

The images shall contain the information of educational, entertaining, instructive or other nature, which causes consumer's positive emotions.

20       The texts may, for example, be useful advises, wishes, parting words, proverbs, sayings.

Figures may illustrate the texts or may have an independent meaning, being, for example, puzzles, rebuses, or conundrums.

The images may be complemented by decorative elements such as  
25 patterns, vignettes, ornaments.

The images become to be attractive to a consumer, thanks to, first of all, their semantic contents.

The images on surfaces of individual envelopes covering separate products, shall be not identical. It is the essential feature of the present invention.

The requirement of the images inequality is satisfied under any of the following conditions:

- the image on the individual envelope surface of, at least, one product in the block of products making minimal commodity unit, does not repeat;
- 5        - the images on the individual envelopes surfaces of any product in the block of products making minimal commodity unit, do not repeat.

The "minimal commodity unit" means in this case a block of homogeneous products incorporated by a common standard packing. The products come to retail trade in the blocks and do not sold separately.

10        The preferred mode of implementation of the invention provides that all images on surfaces of individual envelopes of separate hygienic products making minimal commodity unit, did not repeat.

The individual envelopes covering hygienic products making minimal commodity unit, may vary also by color and texture.

15        It is desirable, that the degree of a variety of the images was such, that the probability of repeated purchase by one consumer of packing of products with the images, already known for him (her), was minimized.

Desirable aroma may be given to the product previously, and then the product can be covered by the individual envelope which creates the internal  
20        hermetically closed sealed space.

The product may be sterilized after it is placed in the individual envelope creating the closed tight internal space.

Hence, the use of the proposed invention can allow not only to increase attractiveness of the individual hygienic products, but also improve their quality,  
25        in particular, thanks to reduction of probability of their damage and pollution.

#### Detailed Description of the Invention

Traditionally all hygienic products making minimal commodity unit, are completely identical in the sense that any hygienic product on appearance and

quality does not vary from any other product which is placed in the commodity unit. The understanding of this fact was the precondition of creation of the present invention.

That rule is observed in all cases: when the hygienic products have or have  
5 no individual envelopes, and when the individual envelopes (if any) bear or bear no images.

The inventive idea is to give to identical on qualities hygienic products, making minimal commodity unit, attributes of individuality, i.e. appearance distinguishing one of these products from the other.

10 This idea is realized because each hygienic product which is placed in a set of products, making the minimal commodity unit, is covered with an individual envelope which surface bears images in the form of texts and/or pictures.

The inventive idea realization depends on meeting the following two conditions.

15 The claimed product covered with an individual envelope with an image on its surface, is characterized in that this image should have the certain semantic meaning: it should be interesting, attractive and useful to a consumer; it should cause in him (her) positive emotions.

The claimed method of packing of the hygienic products covered with the  
20 individual envelopes with the images on their surfaces, is characterized by that these images on surfaces of envelopes of products making minimal commodity unit, are not identical.

The essence of the claimed invention consists in the following.

Each single use hygienic product is placed in the individual envelope  
25 which external surface bears texts and/or pictures of the contents, attractive to a consumer, in particular, of entertaining, educational, instructive, or similar nature.

Some number of such individual products which are not come to the retail trade separately, are covered with individual envelopes, incorporated in a block making minimal commodity unit, and placed in common packing which surface



bears standardized images including the minimally necessary information on the products.

The products may be pampers, sanitary napkins or linings, children's diapers, or similar goods.

5 The individual envelopes, which cover the afore mentioned products, may be made of a material on the paper basis, or of polymers.

Preferred mode of implementation of the invention provides that the hygienic product shall be covered with the individual envelope from all sides, and the individual envelope creates the closed tight space.

10 However it is possible, that the individual envelope may cover the product only partially and the individual envelope did not create the tight cavity.

The images which are placed on a surface of the individual envelope may be in the form of texts, pictures, or combinations of the texts and pictures completed on sense and plot, which contents and form should attract consumer's  
15 attention and interest.

The images may be placed on external or internal surface of the envelope, as well as on its both surfaces.

The text may contain an information of educational, entertaining, instructive, or other nature, which shall cause consumer's positive emotions.

20 It may contain, in particular, hygienic advises, recommendation for children education and care, culinary recipes, an information about the food energetic value, manuals on preparation of children's dietary products, complexes of sports exercises, and also more general information - proverb, sayings, aphorisms, short poems or fragments of poems and prose, children's fairy tales,  
25 wishes, interesting facts and supervisions, all depending on the goods and potential circle of its consumers.

The pictures may illustrate the texts. They may also contain, for example, puzzles, rebuses, or conundrums.

Any images may be complemented by decorative elements, in particular, vignettes, ornaments, patterns, or by other works of decorative art. Answers to tasks may be placed on envelopes back surfaces.

Inequality of the images on surfaces of envelopes covering each product is the essential feature of this invention.

The "images inequality" means the non-coincidence of the complete corresponding images, though separate elements of the images may coincide.

It is understood in the limits of this invention, that the requirement of the "images inequality" is satisfied, if the images on the envelopes of any products making minimal commodity unit, are not identical.

The "minimal commodity unit" is a block of homogeneous products incorporated by a common standard packing which is offered for retail trade and does not sold separately.

The minimal requirement of the "images inequality" shall be considered as observed, if the image on the envelope of, at least, one product in the block of products making minimal commodity unit, does not repeat.

By other words, the requirement of the images inequality is satisfied equally under the following conditions:

- at least, one image on a surface of the individual envelope of the product in the block of products making minimal commodity unit, does not repeat;
- the images on surfaces of individual envelopes of any product in the block of products making minimal commodity unit, do not repeat.

The last mode of the invention implementation is mostly attractive to a consumer, because he (she) receives the maximum of the useful and accessible information at purchase of each minimal commodity unit.

Except for the unequal images, the individual envelopes may differ each other by color or texture.

It is desirable, that the degree of a variety of the images was such, that the probability of repeated purchase by one consumer of packing of products with the images, already known for him (her), was minimized.

5 It is necessary, for this purpose, to update periodically the images, which are placed on a surface of the individual envelopes.

At single purchase by one buyer of several homogeneous commodity units, it is desirable to give him (her) blocks of products with various series of the images on the individual envelopes in the block of products.

10 It is preferable, that the images on individual envelopes covering products in one commodity unit, were logically interconnected, in particular, by common idea, uniform subjects or in a similar way.

The product individual envelope which bears the images, attractive to a consumer, may be the sole one. The products with such envelopes are incorporated in blocks making minimal commodity units and placed in common  
15 packing bearing the standardized information on the goods.

However, the envelope with the information, attractive to a consumer, may be not only sole one. Each such product may be covered also with the second (external) individual envelope bearing images which duplicate the images on the surface of common packing. Such products covered with the double envelope,  
20 also are incorporated in blocks of products and then placed in common packing with the standard information on its surface.

Desirable aroma may be given to the product before it is placed in the internal individual envelope, after that the internal space shall be tightened (hermetic) by the envelope.

25 The product may be sterilized after placing in the envelope creating the tight internal space.

Hence, use of the claimed invention may allow not only to increase attractiveness of individual hygienic products, but also improve their quality by means of reduction of probability of their damage and pollution.

The essence of the applicant's proposal is illustrated by the following examples which are not having, however, any limiting character.

#### EXAMPLE 1.

5       Sanitary linings were placed in individual paper envelopes which surfaces bear images including the texts of hygienic advises, illustrated by the appropriate pictures.

      The linings which were placed in the envelopes, were sterilized, and then each of them was placed in an external individual paper envelope which surface  
10       bears the identical standardized images including the minimal information on the goods (name of the product, date of manufacturing, term of a storage, information on enterprise - manufacturer and so on).

      Any 30 linings were incorporated in blocks making minimal commodity units, and placed in common packing which surfaces bear a minimal information  
15       on the goods, basically repeating the information placed on the products external envelopes.

      Each block of products was formed in such a way, that the images on surfaces of internal individual envelopes of products did not repeat.

      The blocks of products making minimal commodity unit were offered for  
20       retail trade.

#### EXAMPLE 2.

      Each of 30 children's diapers was placed in a paper envelope which surface bears various images in the form of color pictures, bright and attractive to a child,  
25       and also including not repeating advises on a children care.

      This block of products, which makes minimal commodity unit, was placed in a common packing. Surfaces of the packing beard images including the minimal information on the goods. The blocks thus packed were offered for retail trade.

**EXAMPLE 3.**

Aroma of freshness was given to a set of pampers of one and the same size. Each product was placed in a tight individual envelope which surface bears images in the form of texts of optimistic characters being fragments from literary works and inspiring respect for the proof, courageous and persistent people.

Any 20 products, which envelope surfaces bear non-repeated images, were incorporated in blocks making minimal commodity units, and placed in common packing, which surfaces bear images including the minimal information on the goods. The blocks thus packed were offered for retail trade.

Implementation of the present invention should raise competitiveness of the single use hygienic products, which are made according to the invention, thanks to the variety in appearance of products making individual commodity unit, each of which is a source of the accessible, useful, interesting, various and periodically updated information. There will be stimulus for purchase of such products, instead of products without such information.

The images with such information are placed on surfaces of individual envelopes of hygienic products, instead of being placed on the common packing surfaces. It allows to increase essentially the volume of the information, received by a consumer, and also to give to this information essentially new qualities - namely, the variety and non-repeatability.

The known method of placing of the advertising information on packing or elements of packing surfaces solves a task of attraction of consumer's attention to the goods and services which have been not connected directly to the products - carriers of advertising information. It is hardly capable to interest the consumer and to induce him (her) to buy these goods only because they are the carriers of extraneous advertising.

Among other things, the different character of the images placed on the carriers surfaces in the known and in the proposed methods, not only has the

different aims, but determines also different ways of achievement of these aims:  
the images of advertising nature should be regularly repeated, while the images of  
the proposed nature should be regularly changed.

## CLAIMS

1. A single use hygienic product characterized in that
  - it has an individual envelope which surface bears images in the form of
  - 5 texts and/or pictures of educational, entertaining, instructive, or other nature,
  - attractive to a consumer.
2. The product according to claim 1, wherein the individual envelope, which surface bears the images in the form of texts and/or pictures of
- 10 educational, entertaining, instructive, or other nature, attractive to a consumer, is the sole envelope of the product.
3. The product according to claim 1, wherein the individual envelope, which surface bears the images in the form of texts and/or pictures of
- 15 educational, entertaining, instructive, or other nature, attractive to a consumer, is the internal envelope, and the product is additionally covered with an external individual envelope, which surface bears images with the minimally necessary standardized information about the given products.
- 20 4. The product according to claims 1, 2 or 3, wherein the individual envelope with the images of educational, entertaining, instructive, or other nature, attractive to a consumer, covers the product from all sides.
5. The product according to claim 4, wherein the individual envelope
- 25 covers the product from all sides in such a manner that a closed tight space is created inside the individual envelope.
6. The product according to claim 5, wherein the product covered with an individual envelope, is sterile.

7. The product according to claims 5 or 6, wherein the product covered with the individual envelope, is aromatized.

8. A method of single use hygienic products packing characterized in that

5       - any said product is covered with an individual envelope which surface bears images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer,

      - some number of said products, which are covered with individual envelopes, are placed in common packing making a minimal commodity unit,  
10      surface of said common packing bears images with the minimally necessary standardized information about the products, and

      - the images on surfaces of the individual envelopes of products making minimal commodity unit, are not identical.

15       9. The method of packing according to claim 8, wherein any product is covered with a sole individual envelope which surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer.

20       10. The method of packing according to claim 8, wherein any product is covered with the individual envelope, which surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, said individual envelope is internal one, and any product is additionally covered with an external individual envelope which surface bears  
25      images with the minimally necessary standardized information about the products.

      11. The method of packing according to claims 8, 9 or 10, wherein, at least, one image of educational, entertaining, instructive, or other nature,



attractive to a consumer, which is placed on surfaces of individual envelopes of products making minimal commodity unit, does not repeat.

12. The method of packing according to claims 8, 9 or 10, wherein any  
5 image of educational, entertaining, instructive, or other nature, attractive to a consumer, which is placed on surfaces of individual envelopes of the products making minimal commodity unit, does not repeat.

13. The method of packing according to claims 8, 9, 10, 11 or 12, wherein  
10 the individual envelopes, which surfaces bear the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, covering products making minimal commodity unit, are periodically substituted by envelopes which surfaces bear other images of the same nature, thus allowing to minimize probability of repeated purchase by one  
15 consumer of products with the known images on surfaces of the individual envelopes.

14. The method of packing according to claims 8, 9, 10, 11, 12 or 13, wherein any product is covered from all sides by the individual envelope, which  
20 surface bears the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer.

15. The method of packing according to claim 14, wherein the product is covered with the individual envelope from all sides in such a way, that a closed  
25 tight space is created inside the individual envelope.

16. The method of packing according to claim 15, wherein the product covered with the individual envelope, is subjected by sterilization.

17. The method of packing according to claim 14, wherein the product is aromatized before it is covered with the individual envelope.

18. The method of packing according to claims 8, 9, 10, 11, 12, 13, 14, 15,  
s 16 or 17, wherein the products individual envelopes, which surface bear the images in the form of texts and/or pictures of educational, entertaining, instructive, or other nature, attractive to a consumer, have various color and/or texture.

# INTERNATIONAL SEARCH REPORT

International Application No.

PCT/RU 99/00322

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61F13/15 B65075/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61F B65D G09F B44C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.         |
|----------|---|-------------------------------|
| X<br>A   | DE 79 23 932 U (UNILEVER)<br>26 March 1981 (1981-03-26)<br>page 3, line 30-35; claim 1; figure 4                          | 1,2,4,5<br><br>9,14,15,<br>18 |
| X<br>A   | US 2 750 033 A (JOSEPH PICKENS)<br>12 June 1956 (1956-06-12)<br>column 1, line 1-3<br>column 2, line 27-31; figures 1,6,7 | 1,2,4,5<br><br>9,14,15,<br>18 |
| X<br>A   | EP 0 798 229 A (4P FOLIE FORCHHEIM)<br>1 October 1997 (1997-10-01)<br>abstract; figure 1                                  | 1,2,4,5<br><br>9,14,15,<br>18 |
|          | -/--  |                               |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|----------|--|-----------------------|
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